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Finding the ideal polyethylenimine-plasmid DNA system for co-delivery of payloads in cancer therapy

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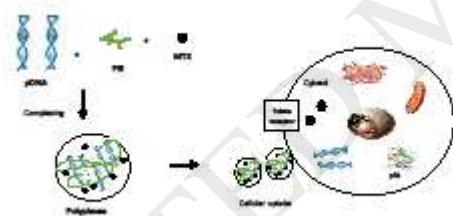
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Graphical abstract



Highlights

A complete study of different polyethylenimine/plasmid DNA polyplexes is presented.

To ensure cell targeting, methotrexate was also loaded into these nanoparticles.

The properties of carriers vary with the polymer nitrogen to pDNA phosphate ratio.

The cell transfection leads to both the release of drug and p53 protein expression.

This is a great contribution for the development of innovative delivery vectors.

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